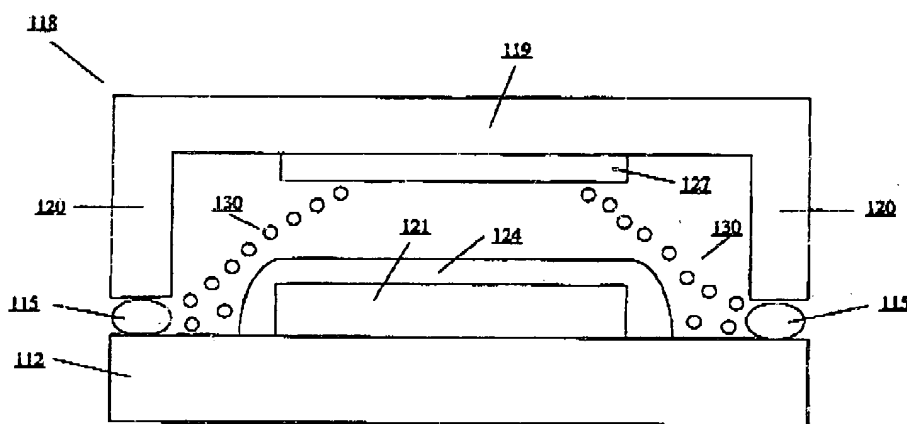


REMARKS

In reply to the Office Action of March 15, 2005, Applicant submits the following remarks. Claims 1 is amended. Claims 24-25 are new. No new matter has been added. After entry of this amendment, claims 1-25 are pending, of which claims 9-23 are withdrawn.

Independent Claim

Independent claim 1 is directed to an encapsulated organic optoelectronic device. An organic optoelectronic device is on a substrate. The organic optoelectronic device includes a cathode. A diffusion layer on the organic optoelectronic device covers exposed areas of the organic optoelectronic device. An adhesive layer surrounds a perimeter of the diffusion layer. The adhesive layer is separated from the diffusion layer by a gap such that the adhesive layer does not physically contact the diffusion layer. An encapsulation lid on the adhesive layer forms a cavity around the organic optoelectronic device such that there is a gap between the encapsulation lid and the diffusion layer. A getter on the encapsulation lid overlies said organic optoelectronic device. The diffusion layer slows a rate of absorption of reactive gasses by the cathode and increases a proportion of said reactive gasses absorbed by the getter relative to said



cathode.

As discussed in Applicant's specification, and as can be seen in Fig. 1 (shown above) depicting one embodiment of the Applicant's inventions, reactive gasses 130 permeate through an adhesive seal 115 of the OLED. A getter 127 within the encapsulated device scavenges some of the reactive gasses 130. A cathode layer of the organic optoelectronic device 121 also acts as a scavenging system. Reactive gasses reaching the cathode layer can shorten the life of the organic optoelectronic device 121. To address the problem of the cathode scavenging the reactive gasses, a diffusion layer 124 is formed on the organic optoelectronic device 121,

covering the exposed areas of the organic optoelectronic device 121. The diffusion layer 124 prevents the cathode from scavenging the reactive gasses that permeate through the adhesive layer. The diffusion layer 124 gives the getter layer more time to scavenge the reactive gasses before the gasses are able to reach the cathode.

Rejections Under Section 102

Prior to this response, claims 1 and 6-8 were rejected as anticipated by U.S. Patent No. 6,835,950 ("Brown"). Applicant respectfully disagrees.

Brown fails to teach the following elements recited in claim 1: (1) "said adhesive layer is separated from said diffusion layer by a gap such that said adhesive layer does not physically contact said diffusion layer", and (2) "said encapsulation lid forming a cavity around said organic optoelectronic device such that there is a gap between said encapsulation lid and said diffusion layer". Rather, in one embodiment, Brown describes an OLED device 116 on a substrate 110 covered by a barrier layer 120 (col. 7, lines 43-66, Fig. 3). The OLED device 116 is covered by a protective layer 126. The substrate 110, protective layer 126 and barrier layer 120 are laminated together with an adhesive 130. The adhesive 130 fully contacts one side of the protective layer 126. In another embodiment, Brown shows a getter material 118 on the barrier layer 120 with a cavity between the OLED device 116 and the getter material 118, but there is no protective layer in the device (col. 8, lines 38-64, Fig. 4). As a result, the Applicant submits that the anticipation rejection in view of Brown should be withdrawn.

Of course, it is not a proper anticipation rejection when the rejection is based on a hypothetical device formed by picking and choosing elements from different embodiments described in a reference. As indicated above in the embodiment of Fig. 3, the substrate 110, protective layer 126 and barrier layer 130 are laminated by an adhesive, with no gaps or cavities in the device. In the embodiment shown in Fig. 4, a cavity is formed around the OLED device 116, which obviates the need for the protective layer 126. The protective layer 126 described by Brown is to protect the OLED device 116 from particulate materials in the adhesive layer 130, as shown in Fig. 3. The protective layer is absent from Fig. 4 because of the existence of the cavity. If a cavity is formed around the OLED device 116, the protective layer 126 is not required.

Rejections Under Section 103

Prior to this response, claims 2-5 were rejected as obvious over Brown. Applicant respectfully disagrees.

Claim 2-5 depend from claim 1 and necessarily include the limitations of claim 1. As discussed above, Brown does not suggest a having an adhesive layer around a diffusion layer, where the adhesive layer is separated from the diffusion layer by a gap. Nor does Brown suggest a device with both a diffusion layer and a cavity. In Brown, the protective layer 126 contacts the adhesive. Any reactive gasses that travel through the adhesive layer could reach the device by continuing to travel through the protective layer 126. In another embodiment, shown in Fig. 4, a gap is provided, but no diffusion layer is supplied. Conversely, in claim 1, and the claims depending from claim 1, a reactive gas that passes through the adhesive layer enters the cavity first. The getter can then scavenge the reactive gas before the gas is able to pass through the diffusion layer and reach the cathode. That is, the diffusion layer keeps the reactive gasses from reaching the cathode as quickly as they would in a device without a diffusion layer and, because the reactive gasses are kept from being scavenged by the cathode, the getter has more time to scavenge the reactive gasses, further preventing the reactive gasses from reaching the cathode. Brown does not suggest a device with elements that cooperate in the same way.

As a result, the Applicant submits that the obviousness rejection in view of Brown should be withdrawn.

New Claims

Claims 24 and 25 are new. Claim 24 depends from claim 1. For at least the reasons provided above, the applicant submits that claim 24 is allowable over Brown.

Claim 25 requires a getter on an encapsulation lid and a diffusion layer. The encapsulation lid with the getter forms a cavity over a device. As described above, Brown does not suggest using the getter and diffusion layer together. Brown only suggests that the protective layer 126 protects the OLED device 116 from particulate materials in the adhesive layer 130. If there is a cavity over the OLED device 116, there is no need for protecting the OLED device 116 from particulates in the adhesive.

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